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(54) **Modeling transmitter and/or transmit observation receiver frequency response and utilization thereof**

(57) Systems and methods for training, or calibrating, a model of a frequency response of a transmitter and/or a model of a frequency response of a transmit observation receiver coupled to an output of the transmitter are disclosed. In one embodiment, in order to train a model of the frequency response of the transmitter and/or a model of the frequency response of the transmit observation receiver, a nonlinear component is connected between an output of the transmitter and an input of the

transmit observation receiver. A combined model for the frequency response of the transmitter, a nonlinear characteristic of the nonlinear component, and the frequency response of the transmit observation receiver is then trained. Preferably, once the combined model is trained, the nonlinear component is disconnected for normal operation of the transmitter and the transmit observation receiver

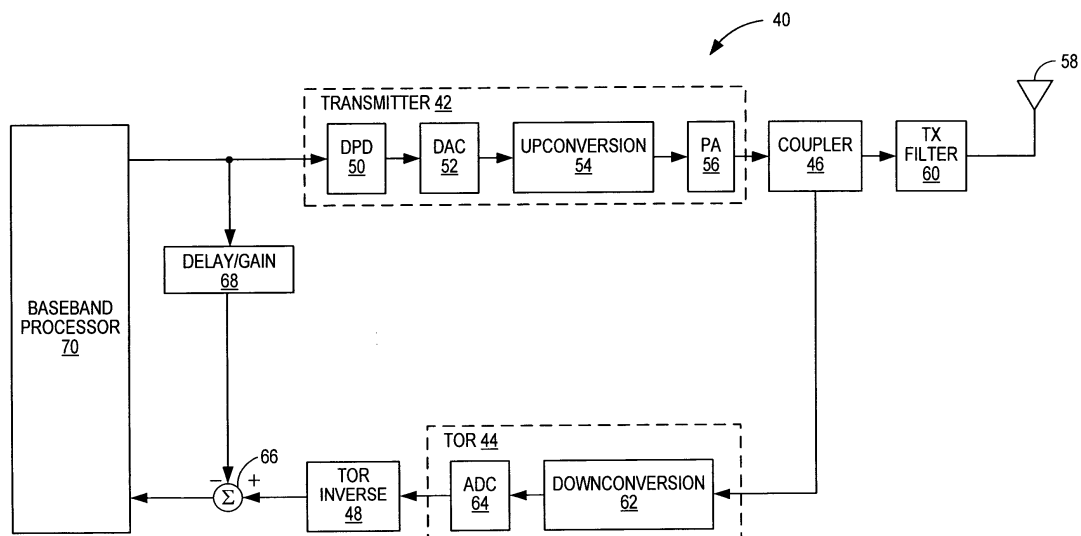


FIG. 2



EUROPEAN SEARCH REPORT

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 EP 13 00 5700

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EPO FORM 1503 03.02 (P04C01)

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			TECHNICAL FIELDS SEARCHED (IPC)
			H04B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 27 June 2017	Examiner Ayala Perriello, M
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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The members are as contained in the European Patent Office EDP file on
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